

REMARKS

Claims 1-8 are pending in the present application. Claim 1 is herein amended. Please reconsider the application in view of the above amendments and the following remarks.

Claim Rejections - 35 U.S.C. § 103

The Examiner has rejected claims 1 and 2 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161). Applicants have amended claim 1. Applicants submit that no new matter has been added to the application by way of the above Amendment. Accordingly, the entry of the Amendment is respectfully requested.

Independent claim 1

Claim 1, as amended, is drawn to ... *each of the sender report packet and the receiver report packet comprises report packets of two kinds differing in size, and the sender side apparatus comprises a transmission bit rate estimation means for estimating a transmission bit rate which is being altered second by second, said estimation means estimating the instantaneous transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size.*

Page 3, lines 19-27 and page 4, lines 1-17 of the present specification states the following:

“[f]or example, in the case of data communication using the third generation portable telephone cdma 2000 1xEV-DO in the sender side apparatus, transmission bit rate (rate mode) in the sending direction of portable telephone is **altered** among, for example, 9.6 kbps, 19.2 kbps, 38.4 kbps, 76.8 kbps and 153.6 kbps step by step [**per second basis**] while considering the radio wave state on the terminal side and the congestion state in the base station. If an encoding bit rate now under transmission exceeds transmission bit rate as a result of alteration of transmission bit rate, the packet loss and jitter increase relatively. Therefore, the sender side apparatus can determine that the encoding bit rate now under transmission needs to be altered, on the basis of the receiver report using the RTCP. Unlike the Internet line premised on the fixed bit rate even though there is a fluctuation, however, only detection of a change in communication rate is not sufficient in such a network in which stepwise alteration of transmission bit rate is conducted as described above. For example, even if it is known from increase in packet loss or jitter that alteration of the encoding bit rate now [**instantaneous**] under transmission is necessary, which value the bit rate should be altered to is not known. In the case where transmission bit rate has been altered, it is necessary to be capable of **rapidly estimating transmission bit rate now [instantaneous] in use and finding an encoding bit rate under transmission to be used concretely.**” (emphasis added)

The transmission bit rate estimation means, as recited in claim 1, makes it possible to concretely estimate an actual transmission bit rate of a continuously altered transmission bit rate wherein Round trip time comprises one or more factors which are affected by packet size and one or more factors which are not affected by packet size. Transmission bit rate can be calculated accurately based on the relation between the round trip time and those factors.

In equation (1) and (2) on page 14 of the present specification, (S_{ss}/R_s) , (S_{rs}/R_r) , (S_{s1}/R_s) and (S_{r1}/R_r) are corresponding to the factors which are affected by packet size, and (D_{srs}) and (D_{sr1}) are corresponding to the factors which are not affected by packet size.

In contrast, Kikuchi, in column 8, lines 50-62, explicitly discloses the following:

“[i]n the input unit 112 provided in the first communication performance measuring equipment, the secondary transmission instructing unit 133 instructs the packet sending/receiving unit 114 to transmit **two control packets whose data lengths are different from each other to the client 101**. The round-trip time measuring unit 134 measures round trip times of each of the two control packets. **Based on the round trip times of the two control packets**, the coefficient estimating unit 135 estimates a coefficient relating to **a factor which varies according to the size of the transmitted packet**, in the **predetermined delay model signifying data transmission** between the branching node 103 and the client 101, and inputs it as a part of the parameter.” (Emphasis added) see also Fig. 4.

Therefore, as noted in column 2, lines 20-24, Kikuchi discloses “techniques of simulating data delivery **based on delay models of routers which exist between the server and the client**, and of accurately evaluating the communication performance on paths between the server and the client. **In other words**, as noted above, Kikuchi estimates a transmission bit rate -- **which is a fixed bit rate** -- based on delay models that signify the transmission data transmission rate between the server and the client and does NOT disclose *a transmission bit rate estimation means for estimating a transmission bit rate which is being altered second by second, said estimation means estimating the instantaneous transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size.*

Because the proposed combination of afore-cited references does not teach or suggest all of the claimed elements and limitations in claim 1, Applicants submit that claims 1-8 would not have been obvious over these references. Accordingly, applicants request that the rejection under 35 U.S.C. 103 be withdrawn.

The Examiner has rejected claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161), as applied in claim 1 above, and further in view of Lansing et al (Pub No.: 2008/0089342).

The Examiner has rejected claims 4, and 5 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161), and Lansing et al (Pub No.: 2008/0089342), as applied to claim 3 above, and further in view of Erickson et al (Pat No. 7,103,062).

The Examiner has rejected claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161), and Lansing et al (Pub No.: 2008/0089342), as applied to claim 3 above, and further in view of Nygard et al (Pat No. 6,044,082).

The Examiner has rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161), as applied to claim 1 above, and further in view of Gardner et al (Pat No. 6,327,275).

The Examiner has rejected claim 8 under 35 U.S.C. § 103(a) as being unpatentable over Kikuchi et al (Pat No. 7,120,125) in view of Uemura et al (Pat No. 6,430,161) and Gardner et al

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(Pat No. 6,327,275), as applied to claim 7 above, and further in view of Krishnamachari et al
(Pub No.: 2003/0072376).

Each of the above rejection is respectfully traversed.

Because claims 3-7 are depend form claim 1, either directly or indirectly, these claims are patentable for at least the same reasons as given above in claim 1.

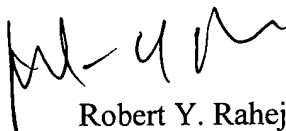
Conclusion

The claims have been shown to be allowable over the prior art. Applicants believe that this paper is responsive to each and every ground of rejection cited in the Office Action in the Action dated May 28, 2008, and respectfully request favorable action in this application. The examiner is invited to telephone the undersigned, applicants' attorney of record, to facilitate advancement of the present application.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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